MedicalXpress

Recurrent mouth and throat cancers less deadly when caused by virus, study shows

February 20 2014

People with late-stage cancer at the back of the mouth or throat that recurs after chemotherapy and radiation treatment are twice as likely to be alive two years later if their cancer is caused by the human papillomavirus (HPV), new research led by a Johns Hopkins scientist suggests.

Previous studies have found that people with so-called HPV-positive oropharyngeal cancers are more likely to survive than those whose cancers are related to smoking or whose origins are unknown.

The new study, scheduled to be presented Feb. 20 at the 2014 Multidisciplinary Head and Neck Cancer Symposium in Scottsdale, Ariz., shows that the longer survival pattern holds even if the cancer returns. Oropharyngeal cancers, which once were linked primarily to heavy smoking, are now more likely to be caused by HPV, a virus that is transmitted by oral and other kinds of sex. The rise in HPV-associated oropharyngeal cancers has been attributed to changes in sexual behaviors, most notably an increase in oral sex partners.

For the study, the researchers used data provided by the Radiation Therapy Oncology Group on 181 patients with late-stage oropharyngeal cancer whose HPV status was known and whose cancer had spread after primary treatment.

There were 105 HPV-positive participants and 76 HPV-negative ones. Although the median time to recurrence was roughly the same (8.2

months vs. 7.3 months, respectively), some 54.6 percent of those with HPV-positive cancer were alive two years after recurrence, while only 27.6 percent of HPV-negative cancers were still alive at that point in time.

The researchers also found that those whose cancers could be treated with surgery after recurrence—regardless of HPV status—were 52 percent less likely to die than those who did not undergo surgery. Surgery has typically been done in limited cases, as doctors and patients weigh the risks of surgery against the short life expectancy associated with recurrent disease.

"Historically, if you had a recurrence, you might as well get your affairs in order, because survival rates were so dismal. It was hard to say, yes, you should go through surgery," says study leader Carole Fakhry, M.D., M.P.H., an assistant professor in the Department of Otolaryngology-Head and Neck Surgery at the Johns Hopkins University School of Medicine. "But this study shows us that surgery may have a significant survival benefit, particularly in HPV-positive patients."

While it remains unclear why patients with HPV-positive tumors have better outcomes than those with HPV-negative tumors, researchers speculate it may be due to biologic and immunologic properties that render HPV-positive cancers inherently less malignant or better able to respond to radiation or chemotherapy treatment.

"Until this study, we thought that once these cancers came back, patients did equally poorly regardless of whether their disease was linked to HPV," she says. "Now we know that once they recur, HPV status still matters. They still do better."

More information: The abstract, "Human Papillomavirus (HPV) and Overall Survival (OS) After Progression of Oropharyngeal Squamous

Cell Carcinoma (OPSCC)," will be presented in detail during the Plenary session on Thursday, February 20 at 12:30 p.m. Mountain time at the 2014 Multidisciplinary Head and Neck Cancer Symposium.

Provided by Johns Hopkins University School of Medicine